

Title (en)

STAGED RADIAL AIR SWIRLER WITH RADIAL LIQUID FUEL DISTRIBUTOR

Title (de)

GESTUFTER RADIALER LUFTWIRBLER MIT RADIALEM FLÜSSIGKRAFTSTOFFVERTEILER

Title (fr)

APPAREIL DE TOURBILLONNEMENT D'AIR RADIAL ÉTAGÉ AVEC DISTRIBUTEUR DE CARBURANT LIQUIDE RADIAL

Publication

EP 3336432 B1 20190904 (EN)

Application

EP 17206882 A 20171213

Priority

US 201615381609 A 20161216

Abstract (en)

[origin: EP3336432A1] A nozzle (100) includes a nozzle body (102) with an inner air passage (104) fed by a first radial swirler (106) and a second radial swirler (108) axially downstream of the first radial swirler (106). A first fuel circuit (110) is axially between the first (106) and second (108) radial swirlers. A second fuel circuit (112) is axially downstream of the second radial swirler (108), wherein each of the first fuel circuit (110) and the second fuel circuit (112) extends from a respective fuel circuit inlet (114, 116) to a respective annular fuel circuit outlet (118, 120). An outer air passage (122) is defined between a fuel circuit outer wall (124) of the second fuel circuit (112) and an outer air passage wall (126), wherein the outer air passage (122) is a converging non-swirling air passage. An intermediate air passage (140) can be defined between an intermediate wall (138) and the second radial swirler (108), wherein the intermediate air passage (140) is a converging non-swirling air passage.

IPC 8 full level

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CPC (source: EP US)

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Cited by

EP4212781A1; EP3870353A4; WO2020086681A2

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